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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,472	02/26/2004	Takahiro Ichihara	925-284	9312
23117	7590	06/14/2006	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			BONCK, RODNEY H	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/786,472

Applicant(s)

ICHIHARA ET AL.

Examiner

Rodney H. Bonck

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

The following action is in response to the amendment and request for continued examination received May 22, 2006. The amendment added two new claims numbered 12. In accordance with 37 CFR 1.126, new claims 12, 12, 13, 14, 15, 16, 17 have been renumbered as claims 12-18, respectively.

#### ***Verified Translation***

Receipt is acknowledged of the verified translation of the priority document. This disqualifies the Ueda et al.(US 2003/0194263 A1) publication as prior art. Accordingly, the rejections relying on Ueda et al. are withdrawn.

#### ***Double Patenting***

Applicant is advised that should claim 7 be found allowable, claim 12 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Applicant is advised that should claim 15 (submitted as claim 14) be found allowable, claim 16 (submitted as claim 15) will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates

Art Unit: 3681

or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Nonstatutory Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6, 13 and 15-17 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,007,781. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to use the one-way clutch unit of the patent on a rotating shaft.

### ***Claim Objections***

The claim 15 (initially numbered claim 14) is objected to because it includes a reference character that is not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims (numbered 14, and 15 prior to renumbering) recite that the first inner ring has different diameters “for providing sufficient thickness”, but it cannot be determined from the claims what thickness would be considered “sufficient”. Therefore, the metes and bounds of the claim are unclear.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7-9, 11, 12, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al.(US 2003/0103848 A1) in view of Imasaka et al.(US 2004/0026201 A1). The Hayashi et al. device discloses a one-way clutch unit comprising a first one-way clutch 85 having a first outer ring with raceway and engagement surfaces and a first inner ring contacting shaft portion 86B and having raceway and engagement surfaces. The one-way clutch unit further includes a second one-way clutch 66 having a second outer ring with raceway and engagement surfaces and a second inner ring with raceway and engagement surfaces. An annular recess is

provided in an inner periphery of the first inner ring of the first one-way clutch. The second one-way clutch is disposed in the annular recess. In Hayashi et al. the outer ring has engagement cam surfaces. These claims require that the recess and the surface received in the recess be curved surfaces. For providing axial compactness, Imasaka et al. provide a recess 43 in gear 16 for receiving hub 5h. Imasaka et al. teach curving the surface to avoid stress concentration. In view of this teaching of Imasaka et al., it would have been obvious to provide curved surfaces in Hayashi et al., the motivation being to reduce axial length and to avoid stress concentrations.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al.(US 2003/0103848 A1) in view of Imasaka et al.(US 2004/0026201 A1) as applied to claims 7-9, 11, 12, 14 and 18 above, and further in view of Fujiwara(US 2002/0183147 A1). This claim requires that the inner ring of the first one-way clutch have an engagement cam surface. In Hayashi et al. the outer ring has the engagement cam surfaces. Fujiwara discloses a one-way clutch that has the engagement cam surface on the inner ring (see Fig. 5). This is a well-known arrangement, and it would have been obvious to one having ordinary skill in this art to provide the engagement cam surface on the inner ring of the one-way clutches of Hayashi et al.

### ***Response to Arguments***

Applicant's arguments filed May 22, 2006 have been fully considered but they are not persuasive. The examiner disagrees with applicants' position that Hayashi does not

Art Unit: 3681

have an annular recess. The recess apparently lacks the curved surface claimed, but Imasaka et al. teach curving the surface to avoid stress concentrations. In Hayashi, element 86C can be considered part of the inner ring 70 of the first one-way clutch such that the inner rings of both clutches directly contact the shaft.

The rejections based on Ueda et al.(US 2003/0194263 A1) are withdrawn. A new double patenting rejection has been added, however, in view of the newly issued Ichihara et al.('781) patent.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney H. Bonck whose telephone number is (571) 272-7089. The examiner can normally be reached on Monday-Friday 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 3681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Rodney H. Bonck  
Primary Examiner  
Art Unit 3681

rhb  
June 9, 2006